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## The Army Veterinary Services in India and Burma

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The campaign against Japan in Burma and the Far East has increased the responsibilities and range of duties of the Army Veterinary Services more, probably, than in any other theatre of war. Certainly nowhere else have we to deal with such a variety of animals and with so many diseases.

At the outbreak of war the Army Veterinary Service was in the process of retrenchment, and this continued until the Japanese campaign in Burma made a return to animal transport necessary. The British and Indian personnel of the Service has expanded to ten times its pre-war strength and is likely to increase still further. The object of this short article is to tell briefly how this expansion came about, the arrangements for the training of officers and men, the classes of animals involved, the complexity of the problems faced, and the organisation designed to deal with them.

The Army Veterinary Service in India includes personnel of both the Royal Army Veterinary Corps and the Indian Army Veterinary Corps. Except for some twenty attached to the I.A.V.C. Training Centre all the officers are graduates of veterinary colleges in the United Kingdom or India. All R.A.V.C. officers are British, and at one time all I.A.V.C. officers were members of the Royal College of Veterinary Surgeons: but in 1944 diplomates of certain Indian colleges also became eligible for the grant of commissions in the I.A.V.C. Viceroy's Commissioned Officers, known as veterinary assistant surgeons, are graduates of Indian veterinary colleges, not eligible or not selected for commission in the Indian Army Veterinary Corps. A small number of British other ranks are employed as farrier instructors, in store depots or as clerks.

One of the earliest problems was the provision of training facilities not only for other ranks but also for newly qualified officers with little or no knowledge of India and tropical diseases. This was solved by the formation in October, 1942, of the I.A.V.C. Centre, which now comprises the Officers' Training School, Army Veterinary School, Training Regiment, Depôt, and Record Section. At the Officers' Training School, which can handle 50 students at a time, all newly appointed Royal Army Veterinary Corps and Indian Army Veterinary Corps officers spend two months undergoing basic military training, instruction in M.T. maintenance and studying veterinary problems of special importance in India.

The establishment of the Centre consists of regimental officers and Indian other ranks, with a senior officer, R.A.V.C., in command. At the Training Wing, which can deal with 1,200 at a time, all recruits receive five months' training before being posted to units. During this period they receive basic military training and technical instruction designed to make them competent veterinary dressers and proficient soldiers. The necessity for Indian Army Veterinary Corps personnel being proficient in the use of arms has frequently been demonstrated in the fighting in Assam and Arakan.

The provision of farriers for units of the Indian Army is a responsibility of the Army Veterinary Service, and their training, which is one of the functions of the Army Veterinary School, is carried out by teams of instructors. Each team, consisting of a chief instructor and six assistants, trains 24 students at a time, each course lasting 16 weeks. The courses continue without interruption throughout the year.

The Army Veterinary School also provides courses in veterinary first-aid and animal management. They run continuously, being attended by officers and men of other arms of the Service and there is no doubt that they have contributed greatly to raising the standard of animal management throughout the Army.

Recently, too, the Army Veterinary School designed a series of courses for officers and Viceroy's commissioned officers in control of cattle stock sections, which handle cattle, sheep and goats purchased for slaughter.

The activities of the Army Veterinary Service, although primarily professional, are many and varied. First comes what may be termed its purely military sphere, that is, with transport animals. Next in importance is its work on military dairy farms, and this has expanded to such a degree that it has been necessary to provide a separate veterinary organisation to deal with it. Slaughter animals take up a lot of time, and Local Production Schemes, started in 1944 for the breeding of pigs, rabbits and poultry, are placing increasing demands upon our resources, while the inspection of fresh meat is a recently added responsibility. The Army Veterinary Laboratory is kept busy, and finally may be mentioned the Veterinary Wing of the Chemical Defence Research Establishment.

Transport animals include horses, mules and donkeys employed throughout India and in operational areas; bullocks used in peace stations, thus releasing horses and mules for service elsewhere; camels, confined by climatic considerations to the North-West Frontier and the Punjab; and elephants, which carry out important work in the jungle in or near Burma.

To provide dairy products for India's ever-growing army the Military Dairy Farms Department has increased its milch cattle from 10,000 to over 60,000, and to-day is probably the biggest dairy organisation in the world. Nowhere are cattle exposed to so many diseases as in India, and so great is the necessity for veterinary supervision and advice that the Army Veterinary Service has provided a special organisation for military farms to ensure that diseases of cattle and buffaloes do not interrupt the regular supply of milk, butter and cheese to the troops. This organisation consists of an Assistant Director of Veterinary Services, who is responsible to the D.V.S. in India, executive veterinary officers specially selected for their knowledge of dairy practice, and on each farm one or more veterinary officers or veterinary assistant surgeons. Each executive veterinary officer is in charge of a group of farms and is responsible for supervising and instructing the veterinary officers and veterinary assistant surgeons.

Even though there are 290 million cattle in India (roughly one-third of all the cattle in the world), the provision of fresh meat for the troops is peculiarly difficult. There are four main reasons for this: the fact that in India animals are not bred or fattened for slaughter, the climate, the enormous distances, and the many infectious diseases endemic in the country. The number of slaughter animals purchased each year for the army runs into several hundred thousands, and while the Royal Indian Army Service Corps procures the animals, the Army Veterinary Service examines and selects them for purchase and is responsible for their health. Many animals cover great distances to reach the purchasing centres—sometimes involving a journey of three or more days by rail—and it is not unusual for animals to spend another seven to ten days in the train from these centres to their final destination. Slaughter stock are also transported by sea (the voyage lasting from one to five days), by train, by motor transport, or on foot, and frequently a combination of all four. Many animals are conveyed 1,500 miles by train, or four times the distance from London to Edinburgh, and what this means in the hot weather can be appreciated only by those who know India. Further difficulties are the delays which occur owing to congestion on the railways and the enforced use of all-metal rail wagons designed for the transportation of goods. Resting stages are so located that animals are in the train for not more than 48 hours at a time, but these rests expose them to infectious diseases. For this reason all cattle are immunised against rinderpest, and many goats and sheep are protected against both anthrax and rinderpest.

Local Development Schemes for breeding pigs, rabbits and poultry have extended the scope of the Army Veterinary Service and have provided fresh disease problems, some of which will be mentioned at a later stage.

Whenever possible the inspection of fresh meat is performed by personnel also engaged on other duties, but in certain centres the numbers killed are so large that whole-time inspectors are required. Meat inspection is included in the curriculum of the Officers' Training School, and, in addition, special meat inspection classes are held.

Much of the work of the Army Veterinary Laboratory is concerned with routine diagnosis, with diseases of dairy cattle and the preparation of vaccines. It has been necessary to form mobile field laboratories to meet the needs of operational areas. These are also available, when required, for despatch to remote parts of India.

The Veterinary Wing of the Chemical Defence Research Establishment is constantly at work, devising means for the protection of animals against poison gas.

India has ever been noted for plagues and epidemics, and certainly nowhere else does the veterinary officer have such a variety of diseases with which to deal: anthrax, glanders, strangles, con-

tagious abortion, pleuro-pneumonia, salmonellosis, pasteurellosis, surra, babesiosis, coccidiosis, rinderpest, foot-and-mouth disease, variola, fowl pox, rabies, encephalomyelitis, ranikhet, epizootic lymphangitis and mange—a formidable list, but all of almost daily occurrence. From a purely professional aspect volumes of interest and value could be written about the incidence of these conditions during the present war. The prevention and control of infectious diseases comprise the most important work of the Army Veterinary Service in India, and brief notes on some of them are given here.

*Surra.*—In 1942, after the Burma campaign, there was a very serious outbreak of surra in horses and mules on the Assam-Burma border. Many thousands of animals contracted the disease and at one time 17 per cent. of the animals of the force were out of action on this account. As a result of the measures taken the disease was brought under control and during the worst months the percentage of infected animals fell from 17 per cent. in 1942 to 7 per cent. in 1943 and 2 per cent. in 1944. The control of surra is dependent on early diagnosis and the treatment and removal of infected animals before they can be a source of infection to others. Early diagnosis is possible only by frequent microscopic examination of wet blood films; it is no exaggeration to say that since July, 1942, millions of blood samples have been examined. A method of preventing and treating the disease by the intravenous injection of antrypol has been devised by the Army Veterinary Service, resulting in about 90 per cent. recoveries. To assist in the work of diagnosis and treatment, anti-surra units have been formed; these units have a high percentage of officers and veterinary assistant surgeons, and are well equipped with microscopes and motor transport.

*Glanders.*—There have been one or two serious outbreaks, but they were quickly brought under control with the aid of the mallein test.

*Epizootic lymphangitis.*—This disease occurs in India and Burma and is known to be fairly common in China, but during the war no cases were discovered in army animals until the autumn of 1944, when an outbreak commenced. Diagnosis is complicated by the contamination of wounds with fungi closely resembling *Cryptococcus farciminosus.* Infected animals have been destroyed but so widespread is the disease that experimental treatment under very close isolation is now being tried.

*Anthrax.*—As several parts of Burma, especially those on the line of advance from India, are known to be heavily infected with anthrax, all horses, mules and cattle in that area are protected with spore vaccine every six months. The disease also occurs periodically on dairy farms, and on such occasions all the animals on the farm are inoculated with spore vaccine. This protection is also given every six months to all imported and pure-bred cattle belonging to the military dairy farms, irrespective of whether or not they are on farms known to be infected. In certain areas the disease causes considerable losses in sheep and goats purchased for slaughter.

*Strangles.*—This condition deserves a few words because of its extreme virulence in two big remount depots in India, where the mortality is in the neighbourhood of 16·64 per cent. of infected animals and 11·15 per cent. of all young stock purchased. Sulphanilamide therapy has been used for some time and the results are encouraging.

*Rinderpest* is the most important cattle disease in India. As soon as possible after purchase all military dairy farm animals, transport bullocks and slaughter cattle are immunised with rinderpest goat virus. This is apt to cause a fairly severe reaction in buffaloes with consequent loss of condition and fall in milk production. These animals are, therefore, given anti-serum simultaneously with the goat virus, and the results are extremely satisfactory. This disease causes annually enormous losses to the cattle population of India, and it is worth mentioning that although many thousands of civilian owned animals have died in the neighbourhood of military dairy farms and cattle stocks sections, the annual loss from rinderpest in immunised army cattle is negligible. In the year 1943-44, for instance, less than 1 per cent. of dairy farm animals died.

*Foot-and-mouth disease* is extremely widspread throughout India but causes little mortality; nevertheless, strict precautions are taken to safeguard dairy farm stock from infection. At times the disease has caused fairly heavy losses in young pigs.

*Variola.*—Variola in cattle and buffaloes, though usually benign, does at times cause mastitis and a few deaths. As it is most frequently introduced to dairy farms by newly purchased buffaloes; these are now treated with the lymph used for the vaccination of humans. The results are not clear-cut, but there is reason to believe that some degree of protection is conferred. Isolated outbreaks of variola occur in horses and mules, and are curtailed by the artificial infection of all animals exposed.

*Pasteurellosis* occasionally kills a few cattle and buffaloes, but it causes enormous losses in ducks, fowls and rabbits. Vaccine is used on a large scale.

*Salmonellosis* has come much to the fore since the introduction of development schemes. The losses in ducks have, at times, been very heavy.

*Ranikhet disease*, also known as Newcastle or Doyle's disease, has, for many years, caused great mortality in poultry in India and Burma. It still results in enormous losses, but it is hoped that a vaccine produced by the Imperial Veterinary Research Institute, Mukteswar, will prove an effective answer to this problem. The vaccine has already been used on a very large experimental scale and has given good results.

SADDLE FITTING DEMONSTRATION: OFFICERS' TRAINING SCHOOL

*Contagious pleuro-pneumonia* in goats has proved a most intractable disease and so far no cure has been found. Measures for its control are therefore based on isolation and prevention of overcrowding. Diseases of swine, poultry, ducks and rabbits all add their quota to the work of the Army Veterinary Service and give the veterinary officer wide and varied experience.

Of the non-contagious diseases, surgical conditions and lameness are the main causes of inefficiency. Sore backs, the bane of pack transport, are numerous. While bad saddle fitting and poor animal management may have contributed to their production, there is no doubt that the most important factors were the nature of the terrain and the hot and moist climate which made the upkeep of pack saddlery a most difficult problem.

Other activities of the Service include advice on nutrition, recognition and treatment of internal and external parasites and sanitary police measures for the control of disease.

A contribution on the activities of the Army Veterinary Service during operations in India and Burma will form the subject of a further article.

## ABSTRACTS

**[The Trend of British Veterinary Parasitology.** Taylor, E. L. (1944.) *Endeavour.* **3**. 150-155.]

The author points out that, in Great Britain, the most economically important parasites of domesticated animals are the helminths and that the story of parasitic disease in Britain largely centres around the derangement of the ecological balance between these parasites and their hosts, which has been brought about by various agricultural developments such as pasture improvement and increased concentration of stock. The growth of parasitology has involved studies of the morphology of the parasites and their classification, their life histories, and their association with disease. The most useful work of the morphologist and systematist, so far as parasites of veterinary interest are concerned, is now complete as is also much of the work on the outlines of life histories. Dividing parasitology into "normal" and "pathological," Taylor notes that the general trend of helminthological investigation is in the direction of epidemiology and that the field of investigation for the immediate future will doubtless be that of chemotherapy, of which the modern methods of investigation have scarcely been applied to veterinary parasitology. He considers that the use of these methods will have the same success that has been obtained in other branches of medicine and will help us to establish more satisfactory control of the parasites than we are able to do at present.

J. N. O.

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**[Convulsive Rickets in a Herd of Garbage-fed Pigs.** Kaplan, M. M., and Weisz, L. (1944.) *Mddx. Vet.* **4**. 56-58.]

[The outbreak described is of particular significance to pig-keepers in this country who maintain their herds largely on swill, and has special point in war-time.]

Pigs affected weighed about 60 lb., were three to four months old and were kept in a low, inadequately lighted pigsty. Nine pigs out of 200 were affected, of which six died within 24 hours of symptoms first being observed. The sequence of events is as follows: The pig stands quietly in a corner with limp tail and head nodding gently a few inches from side to side. Suddenly the hind legs stiffen and the pig assumes a sitting position. Champing of the jaws and profuse salivation occurs and lasts for 30 seconds. The pig falls on its side and performs rapid running movements, thrashing around in circles. After two to five minutes relaxation occurs, and the pig lies exhausted. Some minutes later it seems to have returned to normal again, save for a dejected appearance. Attacks occur at intervals from ten to 30 minutes and are often precipitated by handling.

Three cases are recorded in detail, one of which recovered when 7,000 units of vitamin D (as viosterol) were injected intraperitoneally and 50 mgm. of thiamin hydrochloride intramuscularly. Three tablespoonfuls of bonemeal and one of brewer's yeast, suspended in milk, were also fed by stomach tube.

Twenty more deaths occurred in the herd before the owner could be persuaded to supplement the diet with irradiated yeast, calcium, phosphorus and salt, after which the deaths ceased.

[In a private communication the author draws attention to the similarity of the cases described by Barron (*Vet. Rec.*, Oct. 28th, 1944) to those referred to in his article.] N. S. B.

## A Note on the Appearance of Serological Varieties Among T. Foetus Strains Isolated from Infected Cattle

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During the last few years two methods have been developed by which the diagnosis of trichomoniasis in cattle has been assisted. They are (1) the direct agglutination of living suspensions of *Trichomonas foetus*, by the circulating antibody which develops in the blood of infected animals (Robertson, 1941; Kerr and Robertson, 1941), and (2) the skin reaction produced by the intradermal injection of extract of *Trichomonas foetus* (Kerr, 1944).

Owing to the nature of the disease and the late (or in some cases the feeble) development of agglutinins, the agglutination test has limited application. The skin test has also its limitations due partly to the fact that it, too, depends upon circulating antibody and partly because the specificity of the test has not yet been fully worked out. Both these tests rest fundamentally upon the development of antibody against the infecting organism.

Up to 1943-44 all the strains examined showed the same serological reactions. The strains investigated in this work upon agglutination comprised (1) the North of Ireland strains type, "Belfast," (2) the Cambridge strains type, "Dora," (3) the strain "Utrecht," kindly supplied by Dr. Bos, from Holland, in 1938, and (4) an American strain, "Glaser," sent to us, also in 1938, by Miss Cailleau from the Pasteur Institute in Paris.

In 1943 one of us (M. R.) isolated a strain, "Nixon," from an aborted foetus sent in to the Veterinary Investigation Department at the Institute of Animal Pathology, Cambridge.

This strain was aberrant in its agglutinability and the outbreak was puzzling in that only one animal showed agglutinins against the Belfast strain used in the diagnosis tests, although the severity of the infection among the herd would have led one to expect more sera with a positive reaction.

The strain Nixon was not further investigated at that time although the possible implications were noted. It should be added that with these organisms *inagglutinability* does not necessarily indicate *difference* of antigenic make-up, and the two problems must be investigated separately.

In 1944 a strain, "Manley," was isolated by Mr. Mahmoud (Mahmoud, 1944) at Liverpool and sent by him to Mr. Kerr at the Ministry of Agriculture, Northern Ireland. This strain also showed aberrant behaviour in regard to agglutinability. It was therefore felt that the possibility of serological varieties could no longer be neglected.

This matter is being actively investigated at the present time and the serological analysis of the strains is in progress. The present note is being published owing to the fact that as the use of serological and skin reactions is becoming more widespread the occurrence of aberrant strains may cause considerable confusion.

The strain Manley was used to infect a young animal at insemination and produced a typical example of the disease culminating in abortion at 13 weeks.

Table I

*B17 Virgin Heifer Inseminated and Infected with Strain Manley*

| | 8½ Weeks | 10½ Weeks | 13 Weeks |
|---|---|---|---|
| | Tr. Seen at Times | Tr. Numerous in Vaginal Secretion | Aborted a 12-Week Foetus: Numerous Tr. |
| Titre of blood Against Manley | 8/9 both on normal level | — | 10/8½ positive |
| " Belfast | 9½/9 | — | 10/9 slightly above normal |
| Skin test with Manley extract | 9–10·5 | 9–12 positive | 8–13·5 positive |
| Belfast " | 9–9·15 | 9–10·5 negative | 8–10·5 low positive |

In the infection shown in Table I with the Manley strain the blood response during the brief and acute disease became positive for the Manley strain, but for the Belfast strain the titre was not raised significantly above the normal level.

The skin reaction before abortion was positive with Manley extract and not with Belfast extract. Seven days after the abortion, however, there was a more pronounced skin reaction to the Manley antigen and there was an increased reaction also to Belfast extract, though it was quite significantly less than that produced with the Manley extract.

TABLE II

*[A17] Virgin Heifer Inseminated and Infected with Strain Belfast. Trichomonas became Numerous, Aborted at 12 Weeks*

| | |
|---|---|
| Titre of serum 11½ weeks after infection :— | |
| Belfast strain | 13½/9 a low positive reaction |
| Manley „ | 11/8½ above normal |
| Titre at 15 weeks :— | |
| Belfast strain | 15½/9 positive |
| Manley „ | 10½/7½ above normal |
| Skin test at 17 weeks :— | |
| Belfast extract | 9–12 positive |
| Manley „ | 9–11·5 „ |

In Table II the infecting organism was the Belfast strain and the result was very similar. The blood test showed a positive reaction for the homologous Belfast organism, which rose further after abortion. The Manley strain was also agglutinated above the normal level, but to a definitely lesser extent. Here the skin test was positive for both antigens five weeks after the abortion.

As far as the work has progressed it is evident that the strains Belfast and Manley show considerable overlapping in their response to each other's antibody. They obviously share the antigen to a very considerable extent. Thus, if as is shown in Table III, the titre of the serum is pushed up by vaccination or by infection to a high level against the infecting strain, the heterologous strain will also respond. But at a lower level the distinction between the strains is clear, as is shown in Table I, both in regard to the blood titre and the skin test.

TABLE III

*D6 Virgin Heifer Vaccinated with Belfast Strain, Infected at Insemination with Same Strain. Acute Infection, Abortion at 16 Weeks*

| | Titre of Serum at 15 Weeks |
|---|---|
| Belfast strain ... ... | 18/9½ high positive |
| Manley „ ... ... | 14½/9 positive |

As in field work the diagnosis is, more often than not, made with sera of low or moderate titre, this degree of distinction may be of considerable practical importance.

Table IV illustrates this and shows the skin test reactions in some animals in a field infection in Northern Ireland. An extract was made with the herd strain "Green," and tests were carried out with this and with the Belfast and Manley antigens.

TABLE IV

| Cow | History | Skin Test with Extracts : | | | Blood Titre |
|---|---|---|---|---|---|
| | | Belfast Strain | Green Strain | Manley English Strain | With Belfast Suspension |
| Red I | Aborted at 12 weeks | 8–11 | 9–13 | 9–10·5 | 15/9 |
| Red III | Aborted at 12 weeks | 7·5–12 | 9–13 | 9–9·5 | 16/9 |
| Polly | Still in calf | 7·5–10·5 | 8–12 | 9–9·5 | 16/9 |

In this field infection the Belfast extract and the extract Green from the herd strain give positive results which are in close agreement, whereas the tests with the Manley extract would be recorded as giving a negative reaction.

It is obvious that were this herd examined by means of the skin test with a Manley antigen it would be considered to be skin negative, although it is, in reality, a heavily infected group reacting with a clearly positive skin response to the extracts made with the Belfast strain and also with the herd strain.

Owing to improved methods of cultivation the raising of strains has been much facilitated and there is now little difficulty in getting a trichomonas culture from the vaginal secretion of any well infected animal. Arising from this it has been observed that many of these strains recently isolated, even passage cultures grown from animals infected with well studied strains, may be of poor agglutinability. This does not apparently mean that the strain has necessarily changed its antigenic structure.

The matter is being investigated and it is mentioned here as a warning that agglutinability in *Trichomonas foetus* has to be considered as a separate question, and the nature of the antigen cannot be deduced merely from the failure to agglutinate.

The effectiveness of the skin test as a means of diagnosis in the field requires to be reconsidered in relation to the *degree* of variation in the antigens of the infecting strains. It is possible, however, for a composite antigen to be used.

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## CLINICAL COMMUNICATION

### Psammoma of the Brain of the Horse

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*Subject.*—An eleven-year-old bay mare of the light vanner type.

*Previous History.*—The mare had been stable fed and employed for the past six years on town work. During the first 16 months in town she had been treated for catarrhal fever and also for a small abscess of the withers, but for the four and a half years prior to her last illness she had been in daily work.

*Symptoms.*—She was first reported by the driver for jibbing, starting out normally but refusing to move after being checked at a street crossing. She was finally removed from the van and walked back to stable. The next day she was tried again and worked well for ten days, but on the eleventh day she again refused after travelling about half a mile. I was then asked to examine the mare and had her placed in a loose box under observation for eight weeks.

At first there appeared to be very little wrong with her; temperature, pulse, respiration, appetite and bowels were normal. She just appeared to be stubborn and to resent pulling on the halter. She lifted her off forefoot about six inches from the ground and raised and shook her head. I examined her for an abscess of the poll but found no tenderness. The second day she walked with slightly exaggerated flexion of the hocks but trotted normally. On the fourth day I noticed that her hind legs were drawn slightly more forward than is usual for a horse feeding at the manger. I tested her for tetanus but found no movement of the membrana nictitans. When standing alone the poll was held on a level with, or slightly lower than, the withers, and the hind legs were drawn slightly forward. When walking the head was carried low and there was a slightly increased flexion of both hind legs. When trotting she moved normally with the head carried well up. During periods of obstinacy, if urged to go forward she would raise and shake her head and usually would lift the off foreleg like a pointer. If the head was brought round to make her turn short she would lift the foreleg on the opposite side and lean over until it appeared she would fall. These postures would be held for some seconds before relaxing.

During the third week she made three bids for freedom and jumped the four-foot box door without injury to herself, after which the upper doors were also kept closed. During the fourth week I was informed that on two occasions she had reared up, pawed the air and then run round the box before going to the manger for the morning feed.

During the seventh week the expression of the eyes appeared more watchful and intense and resembled a boxer sparring for an opening. Sudden movement caused her to cringe as though in doubt but she would not move her feet. As there was no improvement she was shot.

*Post-mortem* examination revealed two symmetrical psammomas, one in each lateral ventricle of the brain. Each was about three inches long by one and a half inches thick. The carcase was in good condition. No other abnormality was found.

The diagnosis was confirmed by Dr. T. Hare, to whom I am indebted for his assistance.

THE VETERINARY RECORD

May 12th, 1945

## THE CHALLENGE OF PEACE

IN common with free men everywhere, but with those liberated from bondage specially in our minds, we give thanks to-day for deliverance. The spectre of Teutonic aggression which has stalked Europe for most of a century is laid at last and, as we hope, for ever. The heartfelt tribute that we pay to those of our own number who have made the supreme sacrifice in the cause of freedom is at one with the nation's gratitude to all through whose fearless endurance and effort has come the victory

> "Making earth feel more firm and air breathe braver ;
> Be proud ! for she is saved and all have helped to save her."

After many long years of "blood, toil, tears and sweat," mankind may now, if it will, make fullest use of its new opportunities to resume the march of progress on well-ordered lines. What does this hard-won peace require of us ? Of our country, that it shall reconstruct its riven life, so far as determined men and women can wring good from adverse post-war circumstance of weariness and loss, in a manner worthy of so vast an outpouring of blood and treasure. Of our profession, that as a body and as individuals, it shall become imbued even more fully with the spirit of progress, deeply concerned for the adoption of the best means to equip itself for service. The lessons to be applied from the arena of war to the paths of peace are plain. Select your objectives with care, marshal all your resources and act in unison at the optimum moment. In our calling, as in every other, the prerequisite of progress is agreement on the goal.

It is to the credit of those charged with the management of the affairs of the "National" at the outbreak of the present war that they lost no time in formulating its objective immediately the temporary reservation of members of the profession from military service was announced. All possible measures were taken to ensure that veterinary surgeons, denied the opportunity of service in the field, should play to the full their specialised part in maintaining the resources of the country in livestock and livestock products to meet the nutritional necessities of the nation at war. It was appreciated from the outset, however, that the many contacts made for that specific purpose, with governmental, scientific, agricultural and kindred organisations, were in fact those equally essential for the formulating and implementing of any long-term programme designed not only to meet the livestock requirements of Britain but to enable the agricultural industry safely to assist in the restoration of the depleted herds of our despoiled allies.

The close of the European phase of the present conflict, therefore, finds the profession faced with a much smaller and less urgent problem of demobilisation and civil rehabilitation than was the case in the years immediately following 1918—if, indeed, it arises at all as yet in view of the Empire's Far-Eastern commitments—but with a wider responsibility. It is evident that during the next three or four years at least there will be a pressing need for maximum food production at home, particularly of meat and milk. Whilst some observers may remain sceptical, it does appear that the nation has realised that after this war a real effort must be made to maintain an efficient and prosperous agriculture. The war years have shown the energy and ability of the farming community—energy and ability which were largely wasted between the wars but which we cannot afford to waste in a devastated world. The profession must now press forward to the completion of the task to which, on the initiative of the N.V.M.A., it has set its hand—that of securing an effective measure of control over those diseases and deficiencies of livestock which continue to hamper the efficiency of the country's oldest and—as the Second World War has proved—still most essential industry.

## Royal College of Veterinary Surgeons

### Letter to the Ministry of Agriculture on the Second Loveday Report

At a special meeting of Council, R.C.V.S., held on April 12th and 25th, 1945, it was resolved that the letter reproduced below should be addressed to the Ministry of Agriculture and Fisheries.

Introducing discussion on the letter at the first meeting, the President, Mr. T. M. Mitchell, said: The representatives appointed by the Council to confer with the Ministry of Agriculture and the Department of Agriculture for Scotland and the representatives of the Universities have had two conferences.

At the first meeting the representatives of the College put to the University representatives the views of the Council and there was a fairly long discussion. It was decided at that meeting to call a second conference, to consist of one representative only of each of the Universities with not more than six from the R.C.V.S. At the second meeting the representatives of the Universities expressed their views as to the conditions under which they would undertake veterinary education.

As will be seen from the report the representatives have presented [a circulated document], we found that the Universities insisted that, if they were to interest themselves in veterinary education, they must be allowed to give a complete course with a degree which should be registrable as a qualification to practise.

As the Council had on two occasions decided that its duty to the profession is to maintain its present powers of control over the standard of qualification for practice, the representatives of the College could not agree to this demand by the Universities.

There would seem, therefore, to be a complete divergence of opinion, but with a view to giving you something to discuss, the members of the deputation met yesterday in an endeavour to find a way of overcoming this impasse. And though I must admit such an attempt goes beyond their terms of reference, they venture to submit for the consideration of the Council the draft of a letter to the Ministry of Agriculture embodying provisions which might be acceptable to the profession, and might be adopted by the Universities with a view to bringing about a closer association of the Universities with veterinary education.

The Council then proceeded to discuss the draft letter paragraph by paragraph.

The following is the form of the letter as finally approved.

Royal College of Veterinary Surgeons,

*May 1st*, 1945.

Sir,

*Committee on Veterinary Education in Great Britain*

The Council of this College has given careful consideration to the Reports of the two Conferences with representatives of the Ministry and the Universities of Bristol, Cambridge, Edinburgh, Glasgow, Liverpool and London, and I am directed to transmit to you the following resolution:—

"That the Council being always willing to consider any measures which might lead to improvements in Veterinary Education affirms its readiness to co-operate with the Universities in the training and examination of veterinary students, subject to the following stipulations:—

(1) That the Council shall be granted the power to send inspectors to report on the facilities at the Schools, the course of study and examinations, in the pre-clinical as well as the clinical years;

(2) That in regard to London, Edinburgh and Liverpool Universities, the Council will be willing to agree to exempt from examination in the pre-clinical subjects of the R.C.V.S. course students who have passed equivalent University Examinations;

(3) That in regard to Cambridge University, the Council is willing to reaffirm its approval of the scheme already agreed whereby

candidates who have passed with honours in approved subjects in the Natural Sciences Tripos Examinations, may be exempted from examination by the R.C.V.S. in the subjects specified in the agreed Scheme. Alternatively if the University should plan a complete veterinary course the Council would be willing to grant exemptions as at the other Schools;

(4) That in the case of other Universities where the Council is satisfied with the reports of its inspectors, exemption from the R.C.V.S. Examinations shall be granted to students who have passed University Examinations in such pre-clinical subjects of the R.C.V.S. course as the Council may approve;

(5) That students who have either passed the Examinations of the R.C.V.S. up to the end of the fourth year, or have been exempted therefrom, shall be required to pass the final examination prescribed by the R.C.V.S. in order to be eligible for registration in the Register of Veterinary Surgeons;

(6) That the scheme outlined in paragraphs 2 to 5 above be continued for a period of years during which the Universities may gain experience of education for veterinary practice. The Council, R.C.V.S., would endeavour to co-operate in as generous a spirit as possible with the Universities to make the scheme a success, and if at the end of the period it were found that in the best interests of the profession and of the public, a modification of the scheme is desirable, the Council would be willing to confer again with the Ministry and the Universities on the matter. In the meantime the Council would welcome the nomination of representatives of the Universities on the Examination Committee."

I am to add that the Council noted with regret that at both conferences it was postulated that the Universities could not be expected to set up a veterinary school unless the degrees they award were accepted by the R.C.V.S. as a qualification to practise. In the view of the Council there is no valid reason why such a condition should be laid down. The argument from analogy with medical education is in the Council's opinion invalid, for there is not a complete analogy between medical and veterinary education. On the other hand, the Universities have for a very long period given degrees in Law without requiring that the Council of the Law Society or the Inns of Court should accept those degrees as qualification for admission as a Solicitor or for Call to the Bar. It cannot therefore be laid down as an axiom that Universities cannot be expected to interest themselves in veterinary teaching unless they are allowed to award degrees which must be accepted as a qualification for registration.

As indicated in the resolutions set out above, the Council is ready to co-operate to the fullest extent with the Universities short of giving up the right conferred on the College by its Charters and Statutes, namely, of deciding by its own Court of Examiners who are fit and proper persons to practise the Art and Science of Veterinary Medicine, Surgery and Obstetrics.

Nevertheless the Council is willing to agree to reconsider its decision, after a period during which it will have had the opportunity of judging of the manner in which, and the extent to which, the Universities have established courses of training in veterinary science, and during which the R.C.V.S. will have had the opportunity of examining University students presented for the Final Examination for the Diploma of M.R.C.V.S., and the Council will have had an opportunity of assuring itself as to the status which has been accorded to veterinary teaching in the Universities. The Council does not desire to specify the length of this period but it should be sufficient to give the Universities time to establish chairs in the major subjects of the course, equip laboratories, and secure suitable Field Stations for practical training.

I am, Sir,

Your obedient servant,

FRED BULLOCK,
*Secretary.*

The Secretary,
Ministry of Agriculture and Fisheries,
55, Whitehall, London, S.W.1.

### Weekly Wisdom

*". . . it is an entertaining illustration of the changed point of view to read again Bernard Shaw's* Doctors' Dilemma; *its contempt for clinical medicine and its emphasis on the marvels of opsonins read strangely to-day; for whoever hears of opsonins now? Nothing becomes out of date so quickly as the very up-to-date. Conclusions in clinical observations are difficult to reach, but, once achieved, they have a way of persisting. Thus in my professional lifetime the laboratory has given three different interpretations of Addison's disease, but no one has surpassed his [Addison's] clinical description of it.*—Sir W. Langdon-Brown. *The Evolution of Modern Therapeutics. Brit. med. J.* 1945 (i), 35.

# NOTES AND NEWS

**The Editor will be glad to receive items of professional interest for inclusion in these columns.**

### Diary of Events

May 16th.—Meeting of the Editorial Committee, N.V.M.A., at 36, Gordon Square, W.C.1, 2.30 p.m.
May 17th.—Meeting of the South-Eastern Division, N.V.M.A., at Maidstone (Royal Star Hotel), 2.30 p.m.
**May 22nd.—R.C.V.S. Council Election—Voting Papers issued.**
**May 29th.—R.C.V.S. Council Election—Voting Papers to be returned.**
May 30th.—Spring Meeting of the Eastern Counties Division, N.V.M.A., at Ipswich, 2 p.m.
June 5th.—R.C.V.S. Annual General Meeting, 10, Red Lion Square, W.C.1, 12 noon.
June 5th.—V.V.B.F. Annual General Meeting, 10, Red Lion Square, W.C.1 (following above).
**June 6th.—R.C.V.S. Committee and Council Meetings.**
June 7th.—Meeting of the Central Veterinary Society at the Veterinary Laboratory, Ministry of Agriculture, Weybridge, 2 p.m.

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### PERSONAL

*Births.*—Kidd.—On May 7th, 1945, to Brenda (*née* Wooster), wife of Major A. A. Kidd, M.R.C.V.S., Thame, Oxon—a son.

Linzell.—On May 2nd, 1945, to Audrey (*née* Tyler), M.R.C.V.S., wife of J. L. Linzell, B.SC., M.R.C.V.S.—a son.

* * * * *

### R.C.V.S. OBITUARY

Brown, James Hall, Capt. late R.A.V.C., Oyama, Canada. Graduated London, July 5th, 1882. Died February 9th, 1945.

Spittal, Robert, Capt. late R.A.V.C., Ardvin, Harling Drive, Troon, Ayrshire. Graduated Glasgow, December 22nd, 1889. Died April 22nd, 1945.

* * * * *

### ADDRESSES OF DISEASE-INFECTED PREMISES

Foot-and-Mouth Disease:

*Notts.*—Parson's Cottages, 526, Southwell Road, Rainworth, Mansfield (May 1st).
*Hants.*—Mullin's Farm, Hythe, Southampton (May 4th).

Swine Fever:

*Angus.*—Murray Lane, Montrose (May 4th).
*Ayrshire.*—Moorfield Piggery, Kilmarnock (May 4th).
*Berks.*—West End Park Farm, Warfield, Bracknell (May 1st).
*Derbyshire.*—Common Farm, Barlborough, Chesterfield (May 4th).
*Essex.*—Loffman's Farm, Steeple, Southminster (Apr. 30th).
*Flintshire.*—Sunnyside Gardens, Efordd Derwen, Rhyl (May 1st).
*Lanarks.*—Easterhouse Farm, Easterhouse, Baillieston, Glasgow (May 5th).
*Middlesex.*—St. Bernard's Hospital, Southall (May 2nd).
*Roxburghshire.*—Springhall Farm Cottages, Kelso (May 5th).
*Surrey.*—Barrow Green Court Gardens, Oxted (Apr. 30th).
*Wilts.*—1, Greatfield, Lydiard Millicent, Swindon (May 3rd); Wharf Road Piggeries, Wroughton, Swindon (May 5th).
*Worcs.*—Old Town Hall, Wyre Hill, Bewdley (May 5th).
*Yorks.*—Black Moor Farm, Bardsley, East Keswick, Leeds (May 1st); Bowcliffe Hall, Bramham, Boston Spa (May 2nd); Grove Hall Farm, Darrington, Pontefract; Carney Street, Boosbeck, Saltburn-by-Sea (May 3rd).

* * * * *

### SUMMER RATIONS FOR LIVESTOCK

Apart from the increases already announced in the basic rations for pigs and poultry, there will be few changes in the rationing arrangements for the summer months as compared with last year. Allowances for pedigree pigs, for sows or gilts about to farrow and for sound poultry breeding stock will remain at current rates.

Rations will be available for dairy herds with relatively high average yields and for calves under six months old; supplementary allowances may also be made where poor growth of grass is affecting milk output; where there are individual high yielding cows in herds with an average yield too low to qualify for rations or where in the late summer dry cows and heifers require concentrates before

calving. Allowances for horses, goats and other animals may be made on conditions similar to those operating last summer.

If supplies permit, a special issue will also be made for cows and heifers calving in October and November. A further announcement will be made on this subject.

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## COUNTY HORSE ASSOCIATIONS

It was reported at a council meeting of the National Horse Association that county horse associations have now been formed in Gloucestershire, Somerset, Herefordshire, Yorkshire and Surrey, and that several other counties are following suit.

At the same meeting Mr. E. F. Beckett, M.R.C.V.S., and Colonel Guy Blewitt were elected members of the Council to represent the National Veterinary Medical Association and the Suffolk Horse Society, respectively.

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## SCHEME FOR THE CONTROL OF DISEASES OF DAIRY CATTLE

STATEMENT SHOWING THE NUMBER OF UNDERTAKINGS NOTIFIED TO THE MINISTRY OF AGRICULTURE DURING THE MONTH ENDED APRIL 30TH, 1945

| County | Undertakings Notified | | Total Undertakings | | |
|---|---|---|---|---|---|
| | During Month | Previously | Number | Number of Cattle | |
| | | | | Cows | Heifers |
| ENGLAND | | | | | |
| Bedford | — | 38 | 38 | 918 | 523 |
| Berks | — | 100 | 100 | 3,418 | 2,177 |
| Bucks | — | 99 | 99 | 3,271 | 1,871 |
| Cambridge | — | 13 | 13 | 331 | 203 |
| Chester | 4 | 390 | 394 | 12,954 | 4,479 |
| Cornwall | — | 4 | 4 | 72 | 75 |
| Cumberland | — | 63 | 63 | 1,588 | 1,355 |
| Derby | 1 | 334 | 335 | 9,568 | 5,389 |
| Devon | 6 | 293 | 299 | 4,470 | 2,716 |
| Dorset | — | 69 | 69 | 2,142 | 1,140 |
| Durham | 1 | 285 | 286 | 6,290 | 2,207 |
| Essex | 1 | 245 | 246 | 8,865 | 5,243 |
| Gloucester | — | 101 | 101 | 2,922 | 1,696 |
| Hampshire | — | 384 | 384 | 10,537 | 7,455 |
| Hereford | — | 21 | 21 | 272 | 210 |
| Hertford | 1 | 78 | 79 | 2,405 | 1,455 |
| Hunts | — | 13 | 13 | 475 | 302 |
| Isle of Ely | — | 2 | 2 | 58 | 29 |
| Isle of Wight | — | 14 | 14 | 252 | 127 |
| Kent | 3 | 168 | 171 | 4,421 | 2,515 |
| Lancs. | — | 199 | 199 | 5,714 | 1,810 |
| Leics | — | 104 | 104 | 2,606 | 1,834 |
| Lincs (Holland) | — | 3 | 3 | 25 | 11 |
| Lincs (Kesteven) | — | 23 | 23 | 320 | 168 |
| Lincs (Lindsey) | 1 | 107 | 108 | 2,057 | 1,162 |
| Middlesex | — | 15 | 15 | 611 | 291 |
| Norfolk | — | 192 | 192 | 5,759 | 3,971 |
| Northants | — | 86 | 86 | 2,406 | 1,877 |
| Northumberland | — | 66 | 66 | 2,209 | 1,142 |
| Notts. | 2 | 174 | 176 | 3,862 | 2,345 |
| Oxford | — | 46 | 46 | 1,289 | 1,148 |
| Rutland | — | 8 | 8 | 156 | 107 |
| Salop | 1 | 262 | 263 | 7,987 | 3,829 |
| Soke of Peterborough | — | 1 | 1 | 37 | 31 |
| Somerset | — | 252 | 252 | 6,022 | 3,080 |
| Staffs | 1 | 206 | 207 | 6,072 | 3,241 |
| Suffolk, E. | — | 88 | 88 | 2,116 | 1,543 |
| Suffolk, W. | — | 51 | 51 | 1,054 | 637 |
| Surrey | — | 106 | 106 | 3,156 | 1,415 |
| Sussex, E. | — | 177 | 177 | 4,445 | 2,617 |
| Sussex, W. | — | 113 | 113 | 3,155 | 1,875 |
| Warwick | — | 140 | 140 | 3,366 | 2,135 |
| Westmorland | — | 13 | 13 | 354 | 444 |
| Wilts | — | 94 | 94 | 3,870 | 1,829 |
| Worcester | — | 158 | 158 | 3,265 | 1,537 |
| Yorks, E.R. | — | 106 | 106 | 1,635 | 958 |
| Yorks, N.R. | — | 118 | 118 | 2,402 | 1,523 |
| Yorks, W.R. | — | 265 | 265 | 6,505 | 2,502 |
| WALES | | | | | |
| Anglesey | — | 49 | 49 | 865 | 623 |
| Brecon | — | 8 | 8 | 174 | 105 |
| Caernarvon | — | 111 | 111 | 1,724 | 957 |
| Cardigan | — | 31 | 31 | 585 | 421 |
| Carmarthen | 8 | 242 | 250 | 4,497 | 2,342 |
| Denbigh | — | 50 | 50 | 975 | 503 |
| Flint | 1 | 115 | 116 | 2,586 | 1,160 |
| Glamorgan | — | 105 | 105 | 1,743 | 691 |
| Merioneth | — | 9 | 9 | 117 | 55 |
| Monmouth | — | 54 | 54 | 1,272 | 713 |
| Montgomery | — | 15 | 15 | 294 | 233 |
| Pembroke | — | 77 | 77 | 1,514 | 1,082 |
| Radnor | — | — | — | — | — |
| TOTALS | 31 | 6,753 | 6,784 | 174,636 | 95,114 |

*Notes.*—(1) Operative periods of undertakings: 1 year, 1,139; 2 years, 534; 3 years, 5,111. (2) Undertakings renewed for a further period: 1 year, 940; 2 years, 175; 3 years, 170. (3) Undertakings not renewed at end of operative period, 749. (4) The figures showing the number of undertakings notified during the month, relate to entirely fresh undertakings and do not include undertakings renewed for a further period. Undertakings which have been cancelled or not renewed are not included in the figures for previous notifications.

| County | Undertakings Notified | | Total Undertakings | | |
|---|---|---|---|---|---|
| | During Month | Previously | Number | Number of Cattle | |
| | | | | Cows | Heifers |
| SCOTLAND | | | | | |
| Aberdeen | — | 18 | 18 | 752 | 219 |
| Angus | — | 21 | 21 | 838 | 395 |
| Argyll | — | 6 | 6 | 113 | 115 |
| Ayr | — | 34 | 34 | 1,088 | 841 |
| Banff | — | 3 | 3 | 93 | 42 |
| Berwick | — | 2 | 2 | 53 | 22 |
| Bute | — | — | — | — | — |
| Caithness | — | — | — | — | — |
| Clackmannan | — | 7 | 7 | 282 | 257 |
| Dumfries | — | 13 | 13 | 707 | 610 |
| Dumbarton | — | 3 | 3 | 105 | 86 |
| East Lothian | — | 3 | 3 | 145 | 88 |
| Fife | — | 37 | 37 | 1,370 | 703 |
| Inverness | — | 8 | 8 | 324 | 191 |
| Kincardine | — | 3 | 3 | 127 | 83 |
| Kinross | — | 3 | 3 | 56 | 40 |
| Kirkcudbright | — | 13 | 13 | 778 | 657 |
| Lanark | — | 20 | 20 | 738 | 564 |
| Midlothian | — | 1 | 1 | 44 | 69 |
| Moray | — | — | — | — | — |
| Nairn | — | 1 | 1 | 14 | — |
| Orkney | — | — | — | — | — |
| Peebles | — | 2 | 2 | 28 | 16 |
| Perth | — | 30 | 30 | 679 | 425 |
| Renfrew | — | 7 | 7 | 277 | 201 |
| Ross-shire | — | 2 | 2 | 58 | 52 |
| Roxburgh | — | — | — | — | — |
| Selkirk | — | — | — | — | — |
| Stirling | — | 29 | 29 | 931 | 780 |
| Sutherland | — | 5 | 5 | 105 | 72 |
| West Lothian | — | 1 | 1 | 23 | 18 |
| Wigtown | 1 | 26 | 27 | 1,779 | 1,047 |
| Zetland | — | — | — | — | — |
| TOTALS | 1 | 298 | 299 | 11,507 | 7,593 |

*Notes.*—(1) Duration of undertakings: 1 year, 40; 2 years, 14; 3 years, 245. (2) Undertakings renewed for a further period: included in column 2 of statement): 1 year, 36; 2 years, 6; 3 years, 7. (3) Undertakings expired and not renewed (not included in column 2 of statement): 89. (4) The figures showing the number of undertakings notified during the month relate to entirely fresh undertakings.

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## BRITISH MEDICAL ASSOCIATION PRESIDENT

The Council of the British Medical Association has elected Mr. H. S. Souttar President of the Association in succession to the late Lord Dawson of Penn. Mr. Souttar, who is Surgeon to the London Hospital and a former Vice-President of the Royal College of Surgeons, has been Chairman of the British Medical Association Council and of the Medical Planning Commission. He is Chairman of the Central Medical War Committee.

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## CALLING-UP OF VETERINARY PERSONNEL

In our issue of April 28th we reproduced a letter on the above subject from Mr. J. F. D. Tutt, F.R.C.V.S., of Winchester, published in the *Hampshire Chronicle*. In a further letter appearing in that paper Mr. Tutt writes: "Whilst it is probably correct to assume that if the resolution passed by the Finance and General Purposes Committee of the National Veterinary Medical Association referred to in my last communication on this subject had received favourable consideration the situation might not appear so acute, it would be incorrect and unfair if the impression was conveyed that the shortage of veterinary surgeons in agricultural areas is solely due to the reservation placed on those engaged in the Animal Health Branch of the Ministry of Agriculture and Fisheries. The dearth is universal and not confined to one branch. It is true that the reservation of certain branches has made this more apparent, but by itself it is not the real cause.

"Two main causes can be given as responsible for the demand for more veterinary surgeons:—

(1) Farmers are taking a more intelligent interest in the health of their livestock, and more and more of those who own dairy herds are becoming licensed to produce Tuberculin-tested and other designated brands of milk.

(2) There are more inspections of cattle due to the increased clinical examinations of herds, and the increase in the number of Tuberculin-tested herds."

* * * * *

## SOIL CONSERVATION IN SOUTH AFRICA

Dr. Hugh H. Bennett, chief of the U.S. Soil Conservation Service, in a report on South African agriculture undertaken at the invitation of the Union Government, discloses that South Africa is drying up on a large scale, and already 25 per cent. of its agricultural land has been lost.

Dr. Bennett recommends a greatly increased soil conservation organisation, with special powers, and also greater co-operation be-

tween the State and the farmers, in order to eliminate destructive methods of farming by education and practical aid, backed by a national research programme.

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### FACULTY OF AGRICULTURE AT OXFORD

"Early in term a statute will be promulgated to create a Faculty of Agriculture and Forestry," states the University Correspondent of *The Times*, and continues: "As the preamble explains, this aims 'to bring higher agricultural education into closer touch with the teaching of the honour schools in the natural sciences and in the social sciences, and to relate more closely in teaching and research the Department of Agriculture and the Institute for Research in Agricultural Economics.' The titles of the bodies hitherto in control of the two subjects immediately concerned suggest another useful aim, not stated in so many words; to have as many subjects as possible similarly organised in faculties, instead of having faculties, departments and institutes with varying functions and powers, makes for smoother running.

"The large increase, almost the doubling, of the Government grant to universities will bring to Oxford, as to the other universities, a problem which will need clear thinking and restraint for its solution. There is no lack of objects for which money is needed; but at a moment when there is lack of labour, lack of material, and possibly a shortage of men with the necessary experience, it would be easy to spend wastefully money which could later be spent more profitably.

"The university is engaged on considering how best to give effect to the recommendations of the report of the Goodenough Committee on Medical Education."

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### SHEEP EXPERIMENTAL FARMS

"Professor Scott Watson disclosed at a demonstration on animal husbandry in the south," states *The Farming News* in its issue of April 27th, "that the Government contemplates 'setting up four sheep experimental stations in the West Highlands of Scotland, the East Highlands, the Scottish Border regions, and in Wales.' At these stations, he says, the whole problem of disease, bracken control, re-seeding of pastures, types of sheep, selection, etc., would be studied. When we made enquiries in official circles we were informed that the stage of making decisions on this subject has not yet been reached. Apart from experimental sheep farms, there is the definite proposal, made by the Hill Sheep Committees on both sides of the Border, that there ought to be a hill-farming research station. The Scottish Committee suggested somewhere on the Borders as the best location for such an enterprise."

* * * * *

Recently in the House of Commons, the Minister of Agriculture stated that it was the intention of the director to reopen the houses and museums at Kew as soon as this was compatible with a due regard for public safety and the well-being of the collections. In so far as war-time conditions permitted limited access was being afforded to students for purposes of study.

## CORRESPONDENCE

*The views expressed in letters addressed to the Editor represent the personal views of the writer only and must not be taken as expressing the opinion or having received the approval of the N.V.M.A.*

Letters to the Editor should reach the Office not later than by the first post on Monday morning for insertion in following Saturday's issue.

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### "SOME OBSERVATIONS ON THE SOUNDNESS OF THE CLYDESDALE HORSE"

Sir,—In your issue of April 14th you published an address on the above subject presented to the Dumfries and Galloway Division of the National Veterinary Medical Association by W. G. Robinson, Veterinary Surgeon, Carlisle.

In view of the publicity that has been accorded to this address by the agricultural Press, and the consequent concern expressed by Clydesdale breeders and stallion owners, I feel constrained to claim your indulgence to reply briefly to some of the allegations expressed therein.

Mr. Robinson states, "Over the last five or six years there has been a sudden sharp rise (in unsoundness) until now I have to reject up to 75 per cent. of all the horses I examine." This is surely a very serious indictment of the Clydesdales in the Carlisle area where several celebrated studs exist and are notable for their size, weight and show yard records at premier shows in Scotland. Mr. Robinson also states that his experience has been limited to the last 14 years. My experience is considerably longer, over 45 years, and during that time it is my firm belief that such scheduled diseases as ringbone, sidebone and spavin are certainly on the decrease. This I attribute to the Horse Breeding Act which has been operating for over 30 years, and with which I have been actively associated as examiner and referee since its inception. I also examine several hundred draught horses annually for the railway companies in Glasgow, and my rejections fall very short of those reported by Mr. Robinson. If further proof is necessary, I beg to refer to Annual Report of Registered Clydesdales Licensed in Scotland.

*Registered Clydesdales Licensed in Scotland*

| | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 |
|---|---|---|---|---|---|---|---|
| Applications received by "Dept." ... ... | 485 | 464 | 433 | 368 | 371 | 369 | 318 |
| Licences issued ... ... | 475 | 459 | 427 | 362 | 367 | 364 | 315 |
| Licences refused ... | 10 | 5 | 6 | 6 | 4 | 5 | 3 |

*Note.*—The figures for 1941 are the lowest since 1930, and the second lowest since the Horse Breeding Act came into operation in 1920. This does not include the Clydesdale Stallions Licence by the Board of Agriculture in England.

To continue, Mr. Robinson states "Under the main heading of 'Osteo-arthritis' I include stringhalt, shivering, roaring, grunting, sidebone, ringbone, bone spavin, splint, bog spavin and thoroughpin, as I am convinced that these are all local manifestations of the same generalised condition. Further, I think that most research workers are of the same opinion."

I am aware that this opinion has been held by certain research workers for some years, but I am curious to ascertain what proof they have established to support their deductions, and on what anatomical, pathological or dietetic grounds these opinions are based. Personally I cannot conceive the possible connection between shivering, roaring and bone diseases. Mr. Robinson includes splints in his lengthy category of osteo-arthritic diseases. Does he seriously suggest that a draught horse should be rejected for an ordinary splint?

I have not observed in *The Veterinary Record* any report of the discussion by members of the profession on Mr. Robinson's address, and I await this with considerable interest.

With regard to Mr. Robinson's witty remarks on some types of fashionable show yard Clydesdales, I am in agreement. This show yard craze for close action behind has been overdone to the detriment of the breed; it is altogether unnatural and is only obtained by artificial methods of shoeing in early life. It interferes with the horse's power to set back a heavy load and may even cause him to sit down in the shafts. Luckily in many cases Nature steps in when the close horse comes into heavy work—he opens up behind and adapts himself to draught purposes.

I congratulate Mr. Robinson on the attitude he takes up with regard to the necessity for the examination of mares under the Horse Breeding Act. It is a well-known fact that mares affected with shivering—*probably the most serious and most transmissible of all the scheduled diseases*—are frequently used for breeding and their colt foals sold in early life before the hereditary taint has become manifest. In this way the vicious circle is perpetuated.

Some years ago I had an interview with Sir Robert Greig and other officials of the Department of Agriculture for Scotland, when we fully discussed the problem of the unsound mare. I emphasised the point that *the full benefits of the Horse Breeding Act could never be realised until this problem was faced.* I suggested that a voluntary scheme for registration of sound mares should be adopted in the first instance, and later made compulsory, as was done with stallions in the early days of the Horse Breeding Act.

Unfortunately at that period the funds at the disposal of the Department of Agriculture for the administration of the Horse Breeding Act were not sufficient to enable them to undertake the extra expense of including the examination of the mares, and the subject was allowed to lapse. Circumstances have altered since then. Agriculture is at long last receiving Government recognition and financial support. It appears to me that now is the golden opportunity for the Council of the Clydesdale Horse Society again to raise this important matter with the Department of Agriculture.

Yours faithfully,

JOHN R. McCALL, M.R.C.V.S.,
*Ex-President of the Clydesdale Horse Society of Great Britain and Northern Ireland.*

4, Grosvenor Mansions,
Observatory Road,
Glasgow, W.2.
*May 3rd*, 1945.

Sir,—After reading the paper in *The Veterinary Record* of April 14th by W. G. Robinson, it appears there has been a great deterioration of that most useful animal, the Clydesdale horse, during the last 50 years. My knowledge of the commercial, hard working Clydesdale goes back to over 60 years ago. My father was the owner of a stud of big, heavy draught geldings in Glasgow. The average price paid for them at that time, at six years old, was £70, and I can remember, as a boy, a big gelding that cost £120.

At that period one could purchase all the cows in Ayrshire at an average price of about £10, and these were the ancestors of the high priced cows of to-day. I am mentioning these facts as they probably account for so much attention having been paid to the diseases of horses and so little to those of cows. In many cases the butcher was the attendant of ailing cows, and there was practically no meat inspection at that period.

Heavy haulage by horses was marching towards its zenith at that time. The big, heavy Clydesdale of the period was deep and round chested, shorter legged and of a heavier build than the present high-class pedigree Clydesdale. The farmers in the Clyde valley, the home of the Clydesdale—incidentally it was an Englishman, Lawrence Drew, who is buried in the churchyard at Tollcross (now a suburb of Glasgow), who was the pioneer of the breed—then began to breed more for the show yard: horses with narrower chests, longer legs, smaller bone, long silky hair, long pasterns and big feet. The general run of the gelding bred in the Clyde valley at that time was not suitable for heavy lorry work and was suitable only for lighter haulage. Horse owners classified their horses as heavy lorry horses and light lorry horses, £50 being a good average price for the latter.

The single heavy lorry horse hauled daily loads of about four tons, and a pair of horses in tandem six to seven tons. It is evident that the shaft horse of this team must have been a big, heavy animal to hold back the load at the docks or shipyards. Not many Clydesdales to-day could accomplish this class of work; they would probably be thrown on their heads. The horses were purchased warranted sound, good workers and to lie in stalls; they were not examined by veterinary surgeons, the purchasers generally relying on their own opinion. Occasionally a horse would develop stringhalt or become a shiverer after hard work. Stringhalt did not interfere with their work and a shiverer would work by itself and haul as big a load as any other horse; they would not lie in a stall and had to be stabled in loose boxes. It is often stated that a shiverer cannot back a load: all the shiverers I have seen—and there have been a great many of them during my lifetime—could back a load as well as other horses, and I have heard carters remark that some of them could back a bigger load than they could haul. It may be that the human element, as in many cases, entered into this as the carters of the period were considered to be highly efficient in handling heavy horses and heavy loads.

The biggest gelding and the worst shiverer I ever encountered worked daily and lived to be 18 years old. I do not agree with Mr. Robinson that it is uncommon to find only one form of unsoundness in a Clydesdale except in young horses. The worst complaint that developed at that time was severe strain of the subcarpal ligament and owners knew that even after firing and blistering and a run at grass, a horse so affected would never be fit for hard work again.

There is no doubt the Clydesdale is not the horse for commercial purposes that it was 50 years ago. In May, 1915, as a C.V.S. I proceeded to Tidworth, Salisbury Plain, as V.O. at a remount depot that was being formed to equip the Second Army. Thousands of horses passed through this depot from all over the British Isles and the worst type of heavy draught animal that came to the depot was the Clydesdale from Scottish cities, many of them being unfit for overseas duty.

Diet, which originates in the soil, and management, have more to do with keeping horses in good condition and free from disease than all the drugs or vaccines ever produced or likely to be produced, and the same applies to other animals and man.

Nutrition is a subject greatly to the fore at the present time. About 20 years ago the late Sir William Arbuthnot Lane, the famous surgeon, wrote in a London daily that the majority of diseases were due to errors in diet and that veterinary surgeons knew more about feeding animals than doctors knew about feeding men. As a direct example of diet affecting health, and the detrimental effect of artificial manures which experts will not admit, about 60 years ago farmers around Glasgow began to use nitrate of soda to increase their hay yield. They certainly got a much heavier crop, but when the hay was fed to horses it produced polyuria and it was not long before the farmers had to eliminate the nitrate of soda, as horse owners refused to purchase their hay.

The use of artificial manures and processed food has greatly increased during the last 50 years and so have many diseases previously unknown. An eminent biologist has stated, "Once you interfere with the laws of Nature you never know where things will end." The soil is the origin of life but not many will agree that many diseases are due to the cumulative effect of years of the use of too much artificial manure: it is against the laws of Nature.

It seems rather strange that since the compulsory examination of Clydesdale stallions has been in force their progeny is becoming steadily more unsound, as the latter is considered to be an hereditary condition. When the stallions were not examined for soundness their progeny were less unsound than they are at present—at least that is what is to be deduced from the remarks of Mr. Robinson. An ordinary man would say, if the progeny is unsound, either the stallion or mare or both were unsound. To breed sound horses you must have sound mares as well as sound stallions. The female has as much effect on the progeny as the male, if not more, and old experienced sheep farmers maintain that the ewe is of more importance than the tup. There is an old Scottish saying, "You may get a well doing family from a bad doing father but you will never get a well doing family from a bad doing mother." It is strange that men, when they become eminent, frequently allude to their mother as the source of their success and seldom mention their father.

It is a common practice with breeders of pedigree animals for show yard purposes to keep their mares in idleness. They never have a collar on and never do any work. They are more ornamental than useful. There are cases of unsoundness in horses that only develop when put to hard work. If the mares, instead of being kept idle, were made to work until near foaling time, some of their latent unsoundness would develop and the breeder would know what to expect if he bred from that mare, and the foals would be healthier. That was the custom 50 years ago with the majority of horse breeders, and that was the period when the big, sound, heavy draught gelding was bred—a horse fit for hard work and not an ornament in a show yard. Soil and climate have an effect on the growth and constitution of animals and most of the heavier type of the Clydesdale came from north of the Clyde valley belt.

Since the first World War the internal combustion engine has superseded the horse both in cities and on farms; consequently there is less natural manure for use on the land and recourse is made to artificial manures with a gradual loss of the fertility of the soil and less healthy produce from the soil. When once the agriculturist gets back to more natural methods, using more farmyard manure, then he will produce healthier plant life, which will affect the constitution and stamina of both men and animals, and there will be less disease. If the soil, which is a living entity, is managed as regards nutrition like men and animals, less will be heard of vitamin and mineral deficiencies and many obscure diseases which were unknown a generation ago. Vitamins should be provided through the diet and not as synthetic compounds. Not many will agree with these statements but they are as feasible as many of the theories expressed.

Herewith a quotation from Herbert Spencer: "It is important that we should form something like a general theory of current opinions so that we may neither over-estimate nor under-estimate their worth. Arriving at correct judgments on disputed questions much depends on the mental attitude preserved while listening to or taking part in the controversies and for the preservation of a right attitude it is needful that we should learn how true, and yet how untrue, are average human beliefs. On the other hand, the fact disclosed by a survey of the past that majorities have usually been wrong must not blind us to the complementary fact that majorities have usually not been entirely wrong."

Yours faithfully,

Ardnadam, Dunoon, Argyll. A. Hart.

*April*, 1945.

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## "VETERINARY SCIENCE AND THE STATE"

Sir,—Mr. Ll. Bevan appears to attach much importance to the recent debate in the House of Lords and seems convinced that "at long last, the value of Veterinary Science to the State and the need for an efficient Veterinary Service are recognised" and, as a consequence, recommends that we should consider how our numbers can be considerably increased.

While wishing to share some of his optimism it is well to remember that members of the same House were, a short time ago, equally prepared to recognise the unqualified in the shape of the P.D.S.A. Bill. I prefer to pay much more attention to the repeated failure of the Minister of Agriculture to give a satisfactory reply to the frequent demands of members when asked if he will state the Government's long-term policy for agriculture. Unless the Government states its policy, and it is a favourable one, I, personally, would be very reluctant at the end of a long and costly war to hazard what the conditions in agriculture, and hence in the veterinary profession, will be like in five years' time, and I would be very much against recommending that increased numbers of young men be advised to enter upon a long and arduous course of training such as our profession demands.

Mr. Bevan's appeal to you to throw your columns wide open to discuss this matter appears to be quite unnecessary as *The Veterinary Record* has never erred in the cause of free speech and expression.

Yours faithfully,

Plastirion, H. Williams Smith.

Pentir, Bangor, N. Wales.

*April 30th*, 1945.

## THE R.C.V.S. COUNCIL ELECTION

Sir,—At the forthcoming elections the outstanding issue will be whether or not a candidate is in favour of maintaining the R.C.V.S. as the one and only body capable of exercising control over the teaching of Veterinary Medicine and Surgery, examining in these subjects, and issuing registrable qualifications entitling their holders to practise.

If their attitude to this all-important question is plainly and unequivocally stated members will know for whom they should vote.

Yours faithfully,

23, Queen's Gate Gardens, London, S.W.7. THOMAS LISHMAN.

*April 22nd*, 1945.

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## VETERINARY EDUCATION

Sir,—As one of the signatories to the "monumental" memorandum under discussion, I have read with interest and amusement the several letters since published on the subject.

The view taken seems to be that we have gone to *their* (*i.e.*, your other correspondents') Council behind *their* backs. Surely, is it not also *our* Council?—or is that maybe too presumptuous on the part of a young member?—and surely if any member seeks to influence his Council for what he honestly considers his own and others' well-being, he is acting legitimately. It is, of course, up to Council to say whether his wishes are rational or otherwise and to act accordingly.

I should like to enquire just how the views of the profession have been "sought and acquired by the usual democratic channe's" as stated by one of your correspondents? I can assure him that my views have not been sought—and I hastened to sign the memorandum so that they would be acquired, lest democracy should pass me by and *not* seek them. The matter affects young members to a greater degree than the older ones and it is one of the unfortunate aspects of the "hurly burly" of veterinary practice that young members do not usually get many opportunities for attendance at N.V.M.A. meetings (which meetings, presumably, represent the usual democratic channels referred to). However, one may read and hear of such meetings and realise that for every member attending with carefully pondered views upon these and other important matters, there are many who regard the gathering more or less as a social function, without having considered them to any great extent, and who can, therefore, be swayed by certain far-wandering politicians famed for their verbosity and rhetoric. The effect of such rhetoric upon certain members who may, like the self-confessed one, be prepared to "sign a memorandum to buy sun helmets for Eskimos" can well be imagined.

One correspondent draws attention to a passage in the Loveday Report concerning the meagre knowledge of the universities of veterinary activities. Is he proud of this? Surely such lack of knowledge on the part of the acknowledged seats of academic and scientific achievement in this country speaks ill for the 100 years' endeavour by the R.C.V.S. to advance the profession.

It seems to me that it is not so much what the older members of the profession think of the profession that would indicate the profession's health, nor even what the profession as a whole think of themselves (and such complacency is wondrous rare). No, it is what the *other* professions and scientific bodies think of us that would indicate the true state of our health! The one way to find this out is to join them on an equal footing and to work with them—or are we perhaps a little wary of coming out of our isolation to seek their opinions—lest such opinions should find us wanting?

Lastly, a word in answer to the somewhat puerile charge of "turncoatism." Men sufficiently well educated to realise their own ignorance and limitations will always be prepared to listen to advice from others, and if, after carefully examining such advice, they are convinced that their coats seem a little less elegant than they had hitherto thought, why then, they will have the courage of their new found convictions and, even at the risk of drawing down upon themselves the wrath of certain gentlemen, "laughing at their latest buffoon-like antics," proceed to turn their coats, thereby presenting a greater degree of sartorial elegance to the world at large.

It seems indeed an ill omen that one so young in professional experience should have already attained fixed views on any subject. The profession as a whole, and the younger members in particular, should be progressing every day, and if we refuse to "turn our coats" to accept new ideas the profession will rapidly pursue a downward course.

Yours faithfully,

2, Carlton Street, Welford Road, Leicester. W. H. CARR.

*April 28th*, 1945.

Sir,—In recent letters to your paper and in your supplement of March 31st, I have noticed some difference of opinion about the student view on university affiliation and the one-portal system. It might, then, be of value if the opinion of the Association of Veterinary Students on this matter was published at once.

The Council of the Association met on April 5th and 6th, 1945. The Council consists of two elected representatives from each college—only one arrived from Dublin because of travel difficulties. With the exception of Dublin, each college was informed beforehand of the subject to be raised by the other colleges. Thus each college was able to discuss fully each subject and to instruct its delegates in what to say and how to vote.

With reference to "The Future of Veterinary Education," the following motions were put forward and voting was as shown:—

1. "That it would benefit the veterinary profession to have two new schools."
   FOR: London; Edinburgh; Liverpool; Dublin. Seven delegates.
   AGAINST: Glasgow. Two delegates.
2. "That veterinary research would increase if all veterinary teachers were contained in university organisations."
   FOR: London; Edinburgh; Liverpool. Six delegates.
   AGAINST: Nil.
   ABSTENTIONS: Glasgow; Dublin. Three delegates.

3a. "That veterinary education would improve under the control of the universities."
   FOR: London; Edinburgh; Liverpool. Six delegates.
   AGAINST: Glasgow. Two delegates.
   ABSTENTIONS: Dublin. One delegate.

3b. "That a full faculty of veterinary science must be set up in any university in which a veterinary school is established."
   PASSED UNANIMOUSLY.

4a. "That the type of examinations which the universities would conduct is better than that type conducted at present by the Royal College of Veterinary Surgeons."
   FOR: London; Edinburgh; Liverpool; Dublin. Seven delegates.
   AGAINST: Glasgow. Two delegates.

4b. "That for these examinations there should be internal and external examiners."
   FOR: London; Edinburgh; Liverpool; Dublin. Seven delegates.
   AGAINST: Nil.
   ABSTENTIONS: Glasgow. Two delegates.

5. "That—provided there is a conjoint examining board, chosen by the universities and the Royal College of Veterinary Surgeons for the clinical subjects—the power proposed for the Royal College of Veterinary Surgeons (by the Loveday Report) is greater than the power which it holds at present."
   FOR: London; Edinburgh; Liverpool. Six delegates.
   AGAINST: Nil.
   ABSTENTIONS: Glasgow; Dublin. Three delegates.

6. "That the prestige of the veterinary surgeon in the estimation of the public would be increased as a result of his (or her) education in a university."
   FOR: London; Edinburgh; Liverpool; Dublin. Seven delegates.
   AGAINST: Glasgow. Two delegates.

7. "That all veterinary colleges to which the Loveday Report refers should become faculties within their own universities as soon as possible and that there should be no exception."
   FOR: London; Edinburgh; Liverpool. Six delegates.
   AGAINST: Glasgow. Two delegates.
   ABSTENTIONS: Dublin. One delegate.

It will be seen that these points are, with slight alteration, those already published by the students of the London College.

I would point out that several delegates expressed, as the view of their college, that "Point No. 5" fully guards, and even increases, the power of the Royal College of Veterinary Surgeons to control entry into the veterinary profession.

I have given in detail the composition of the Council of the Association of Veterinary Students and the voting on the above propositions, in the hope that in these days of apparent distrust in our future profession it will avert criticism of the method by which the propositions were passed.

Yours faithfully,

PETER N. HULL, *President, A.V.S.*

The Veterinary Field Station, "Leahurst," Windle Hill, Neston, Cheshire.

*April 25th*, 1945.

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### Notice to Correspondents

***In view of the interest which has been aroused in certain current topics, the Editorial Committee has allowed considerable latitude in regard to the length of published letters. Owing to the continued stringency of the paper situation, however, the Committee again finds it necessary to urge correspondents to restrict their communications to a maximum of 350 words.***